

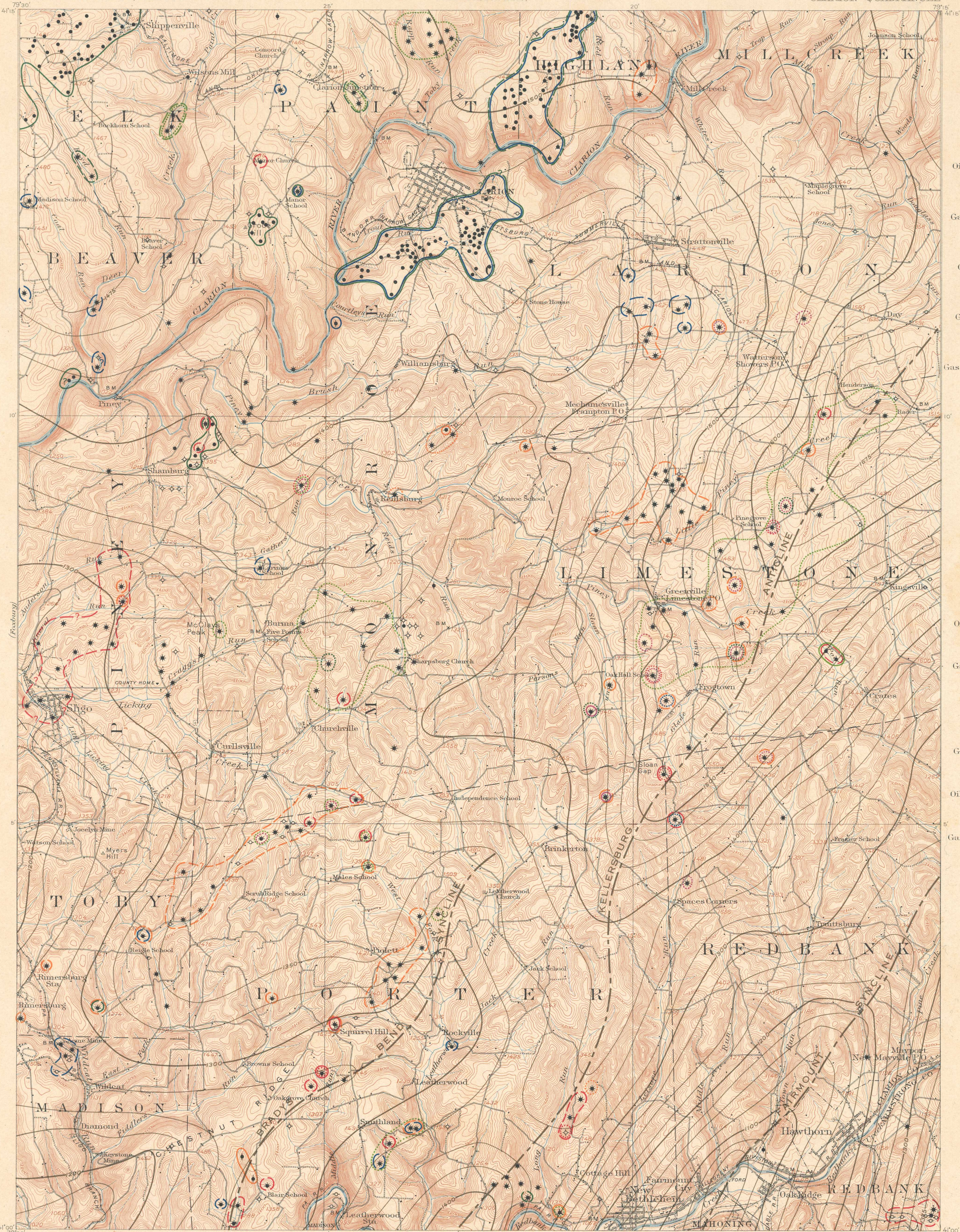
OIL AND GAS

STATE OF PENNSYLVANIA

GEORGE W. MCNEES, RICHARD R. HICE, ANDREW S. MCCREATH
COMMISSIONERS

PENNSYLVANIA
CLARION QUADRANGLE

U.S. GEOLOGICAL SURVEY
GEORGE OTIS SMITH, DIRECTOR



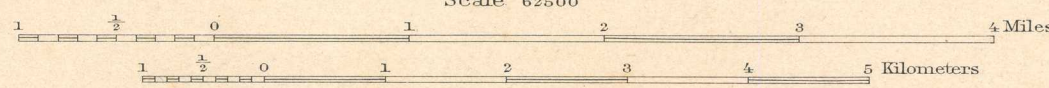
LEGEND

- Gas pools in 1st sand
- Oil pools in Murrysburg sand (in places called 2nd sand)
- Gas pools in Murrysburg sand (in places called 2nd sand)
- Oil pools in 100-foot sand (in places called 2nd sand)
- Gas pools in 100-foot sand (in places called 2nd sand)
- Gas pools in Nineveh 30-foot sand
- Oil pools in 3rd sand
- Gas pools in 3rd sand
- Oil pools in 4th sand
- Gas pools in 4th sand
- Gas pools in 5th sand
- Oil pools in Speechley sand
- Gas pools in Speechley sand
- Gas pools in Tiona sand
- Gas pools in Sheffield sand
- Oil pools in Bradford(?) sand
- Gas pools in Bradford(?) sand
- Structure contours drawn on the top of the Varport limestone member (contour interval is 25 feet, datum is mean sea level, generalized structure of 3rd sand shown in next figure)
- Oil wells
- Gas wells
- Oil and gas wells
- Show of oil
- Show of gas
- Show of oil and gas
- Dry holes
- Holes about which nothing is recorded

H.M. Wilson, Geographer,
Robt. D. Cummin and J.H. Jennings, in charge of section.
Topography by Robt. D. Cummin and E.W. McCrary.
Control by E.L. McNair and W.T. Griswold.
Surveyed in 1905 and 1906.

SURVEYED IN COOPERATION WITH THE STATE OF PENNSYLVANIA.

APPROXIMATE MEAN
DECLINATION 1906.



Contour interval 20 feet.

Datum is mean sea level.

Edition of April 1911.

Geology by W.J. Munn and E.F. Lines,
under direction of Geo. H. Ashley.
Surveyed in 1906 and 1907.

SURVEYED IN COOPERATION WITH THE STATE OF PENNSYLVANIA.